Combined Heat and Power Technical Workgroup Meeting



Michael Colvin Policy and Planning Division

California Public Utilities Commission

CHP Plays Two Roles

- In the context of AB 32, Combined Heat and Power (CHP) is both:
- An emitter of GHG
- An emissions reduction strategy
 - Additional non-GHG policy reasons that have CHP as part of our portfolio

Reaching the Target

Scoping Plan states 4,000 MW of *new* CHP to get 6.7 MMT of reductions statewide

The CPUC's approach is to look at improving efficiency of existing facilitie and to bring on new to reach emission reduction target for IOUs

Reaching the GHG Target

Start with Baseline of GHG Emissions

Already Avoided From the Existing CHP Fleet

Addition of *new* CHP facilities (with GHG benefits compared to a benchmark)

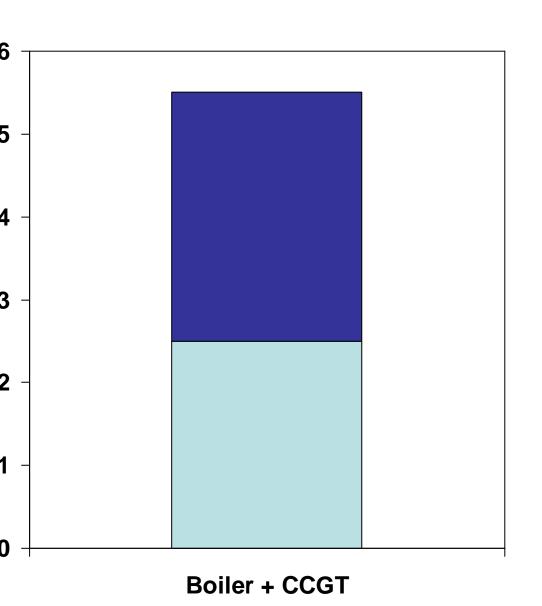
Repowering or improvement of existing facilities (to get additional GHG benefits compared to baseline)

Removing existing *inefficient* facilities (are GHG adding compared to a benchmark)

Losing existing *efficient* facilities (makes the target larger)

IOU Share of CHP's Scoping Plan Target

What Would Happen "If Not for" CHP?



- Benchmark is a combination of a heat rate AND a standard boiler efficiency
- The difference between a benchmark and CH is the GHG reduction.
- The "cap" would induce the benchmark to be more efficient

ew Policy Framework for Ch

- Barriers exist for increased CHP penetration Feed-in Tariff will be a part of the new framework
- New rulemaking (OIR) to coordinate policy CHP issues
- Accomplish share of Scoping Plan target and ot policy drivers
- Timeframe: Framework development in 2009-10;
 Implementation in 2010

Feed-in Tariff for CHP

- A CHP facility up to 20 MW nameplate that in new / repowered
- Goal is to promote a thermal match to maximize use of waste heat
- Tallows the facility to sell excess electricity generated
- HG reductions from program will count towards Scoping target
- Two contracts under development
- ne for "small" facilities
- ne for "medium" size facilities
 - Established by AB 1613 and modified by AB

Details on Feed-in Tariff

- Initial Staff Proposal released and workshop held in February
- Additional negotiations on contract occurred i Spring
- Final Staff Proposal released in July 2009 nsiders contracts, pricing proposals, other program on elements
- Collaborating with CEC on efficiency matters and other terms & conditions
- Tariff targeted completion by end of calendar year 2009
- Phase II develop "pay as you save" pilot

How the Pieces Fit Together

Small Large (< 20 MW) (> 20 MW)

New / Repowered Feed-in Tariff

CHP OIR

Existing

CHP OIR

CHP OIR

These program options will coordinate with ach other to reach GHG and policy objectives

Thank you! For Additional Information:

www.cpuc.ca.gov

Michael Colvin mc3@cpuc.ca.gov (415) 355-5484

